

Amendments to the Specification

Please amend the specification as indicated.

Please amend paragraph 10 as follows:

A method is also disclosed for making an electromagnetic radiation diffuser. A substrate is provided upon which a three dimensional profile having individual grid units is fabricated. A reflective coating is then formed over the three dimensional profile such that the reflective coating substantially conforms to the profile upon which it rests. An absorptive grating is formed over the reflective coating. This absorptive grating allows optical diagnostics, such as a Ronchi test, to be performed on the incident wavefront.

Please amend paragraph 13 as follows:

The accompanying drawings, which are included to illustrate exemplary embodiments of the invention, are incorporated in and constitute a part of this specification, illustrate embodiments of the invention and together with the description serve to explain the principles of the invention. Like numbers refer to like components throughout, and the first numeral represents the figure in which that element first appears. In the drawings:

Please amend paragraph 17 as follows:

~~FIGS.~~ FIGs. 4A and 4B show two views of an embodiment of the randomized structure peak and valley profile.

Please amend paragraph 24 as follows:

FIG. 2 shows a Ronchi-shaped grating 210 that can be implemented on electromagnetic radiation diffuser 150 according to an embodiment of the invention. ~~FIGS.~~ FIGs. 3A-3B illustrate a desired result when shearing interferometry is implemented in an optical system, such as optical system 100, to perform a Ronchi test.

Please amend paragraph 39 as follows:

The net result of the above disclosure is an engineered reflective electromagnetic radiation diffuser 150, operative at EUV wavelengths. Overlaid on the diffuser plate 500 is an absorptive grating 505 that acts as a specialized Ronchi ruling for use in optical analysis of extremely short wavelength lithographic systems, such as an EUVL system. Referring back to FIG. 1, electromagnetic radiation from source 105 is provided to source module 115. Source module 115 contains an electromagnetic radiation diffuser 150 that includes one or more diffuser plates 500. Electromagnetic radiation will be diffusely reflected to the projection optics 130, and an image of the absorptive grating 505, free of facets, will be present at the sensor module 140 for wavefront analysis using, for example, shearing interferometry. The desired interferogram 310 can thus be used for a variety of optical diagnoses.